

Business Research Methods:

Introduction



By Dr. Satyabrata Dash

**Professor- MBA Marketing
SMIT- PGCMS, Brahmapur**

Introduction

- Organizations often want to know every thing about their products, services, programs , policies, etc. Business research is a systematic way to collect information and get knowledge out of it with a methodology so that the derived knowledge can be used to make decisions.
- Usually managers face major issues like:
 - **Ongoing complaints from customers,**
 - **Need to convince financers/bankers for advances,**
 - **Unmet needs among customers,**
 - **The need to polish an internal process,**
 - **Issues while managing men, machines, material and money,**
 - **Issues of forecasting and future plans.**

Meaning or research

- It is a systematic inquiry that provides information to guide managerial decisions.
- More specifically, it is a process of planning, acquiring, analyzing, and disseminating relevant data, information and insights to decision makers in ways that mobilize the organization to take appropriate actions that, in turn, maximize business performance.

Why business research

- Business competition: customers, products, industry competition
- Business environment
- Maturing of management as a group of disciplines
- Explosive growth and influence of the internet.
- Stakeholders demanding greater influence
- More global competition
- More government intervention
- More complex decisions
- Lower cost data collection
- Better visualization tools
- Powerful computations
- Advanced analytical tools for enhanced insights
- New perspectives on established research methodologies

Survey vs. experiment

- A survey is a research technique in which information is gathered from a sample of people using a questionnaire.
- The task of writing a list of questions and designing the exact format of the printed or written questionnaire is an essential aspect of the development of a survey research design
- Experiments are studies involving intervention by the researcher beyond that required for measurement. The usual intervention is to manipulate some variable in a setting and observe how it affects the subjects being studied.
- The researcher manipulates the independent and or explanatory variables and then observes whether the hypothesized dependent variable is affected by the intervention.

Nature

- **Purpose clearly defined**
- **Research process detailed**
- **Research design thoroughly planned**
- **High ethical standard applied**
- **Limitations frankly revealed**
- **Analysis adequate for decision makers needs**
- **Findings presented unambiguously**
- **Conclusions justified**
- **Researchers experience reflected**

Scope of Business Research

- The scope of business research is limited by one's definition of 'business'.
- Both for profit or not for profit organization
- It covers a wide range of phenomena
- It is inclusive of intuitive information gathering to systematic and objective investigation
- It includes different specialized area like marketing, finance, HR etc.
- It may be internal or external to the business organization.

Research and scientific methods

- Scientific method is the pursuit of truth as determined by logical considerations. The ideal of science is to achieve a systematic interrelation of facts.
- Scientific method attempts to achieve “this ideal by experimentation, observation, logical arguments from accepted postulates and a combination of these three in varying proportions.
- The scientific method is, thus, based on certain basic postulates which can be stated as under:
 1. It relies on empirical evidence
 2. It utilizes relevant concepts
 3. It is committed to only objective considerations
 4. It presupposes ethical neutrality, i.e., it aims at nothing but making only adequate and correct statements about population objects;
 5. It results into probabilistic predictions;
 6. Its methodology is made known to all concerned for critical scrutiny are for use in testing the conclusions through replication;
 7. It aims at formulating most general axioms or what can be termed as scientific theories.

Research Design

- The research design is the master plan specifying the methods and procedures for collecting and analyzing the needed information.
- It constitutes the blueprint for the collection, measurement, and analysis of data.
- It aids the researcher in the allocation of limited resources by posing crucial choices in methodology.
- The plan is the overall scheme or program of the research, includes an outline of what the investigator will do from writing hypothesis and their operational implications to the final analysis of data.
- It expresses both the structure of the research problem –the framework, organization, or configuration of the relationship among variables of a study.

Features of research design

- An activity and time based plan
- A plan always based on the research question
- A guide for selecting sources and types of information
- A framework for specifying the relationship among the study's variables
- A procedural outline for every research activity
- Setting of research questions
- Method of data collection
- Research control variables
- The purpose of the study
- The time dimension
- The topical scope
- The research environment
- Participants' perception

Types of research

- The basic types of research are as follows
 1. Descriptive research includes surveys and fact-finding enquiries of different kinds. Its purpose is description of the state of affairs as it exists at present.
- In social science and business research we quite often use the term Ex post facto research for descriptive research studies. The main characteristic of this method is that the researcher has no control over the variables; he can only report what has happened or what is happening. Most ex post facto research projects are used for descriptive studies in which the researcher seeks to measure such items as, for example, frequency of shopping, preferences of people and the like.

Types of research

2. Analytical research

- This type of research requires a researcher to use facts or information already available, and analyze these to make a critical evaluation of the material.

3. Applied research, Research can either be applied (or action) research .Applied research aims at finding a solution for an immediate problem facing a society or an industrial/business organisation.

Types of research

4. Fundamental research, This is some times termed as basic or pure research which is mainly concerned with generalisations and with the formulation of a theory.
 - It is concerning with some natural phenomenon or relating to pure mathematics and sometimes concerning human behaviour carried on with a view to make generalisations about human behaviour are example of fundamental research

Types of research

5. Quantitative research.

- Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity.

Types of research

6. Qualitative research

- This type of research is concerned with qualitative phenomenon, i.e. phenomena relating to or involving quality or kind. For instance, when we are interested in investigating the reasons for human behaviour (i.e., why people think or do certain things), we quite often talk of 'Motivation Research', an important type of qualitative research.
- This type of research aims at discovering the underlying motives and desires, using in depth interviews for the purpose

Types of research

7. Conceptual Research

Conceptual research is that related to some abstract idea(s) or theory. It is generally used by philosophers and thinkers to develop new concepts or to reinterpret existing ones.

8. Empirical research

This type of research relies on experience or observation alone, often without due regard for system and theory. It is data-based research, coming up with conclusions which are capable of being verified by observation or experiment.

Other types of research

- Exploratory research
- Historical research
- Field setting research
- Laboratory research and e.t.c

Research Process

Define Research Problem



Literature Review



Formulate Hypothesis



Design Research



Collect Data

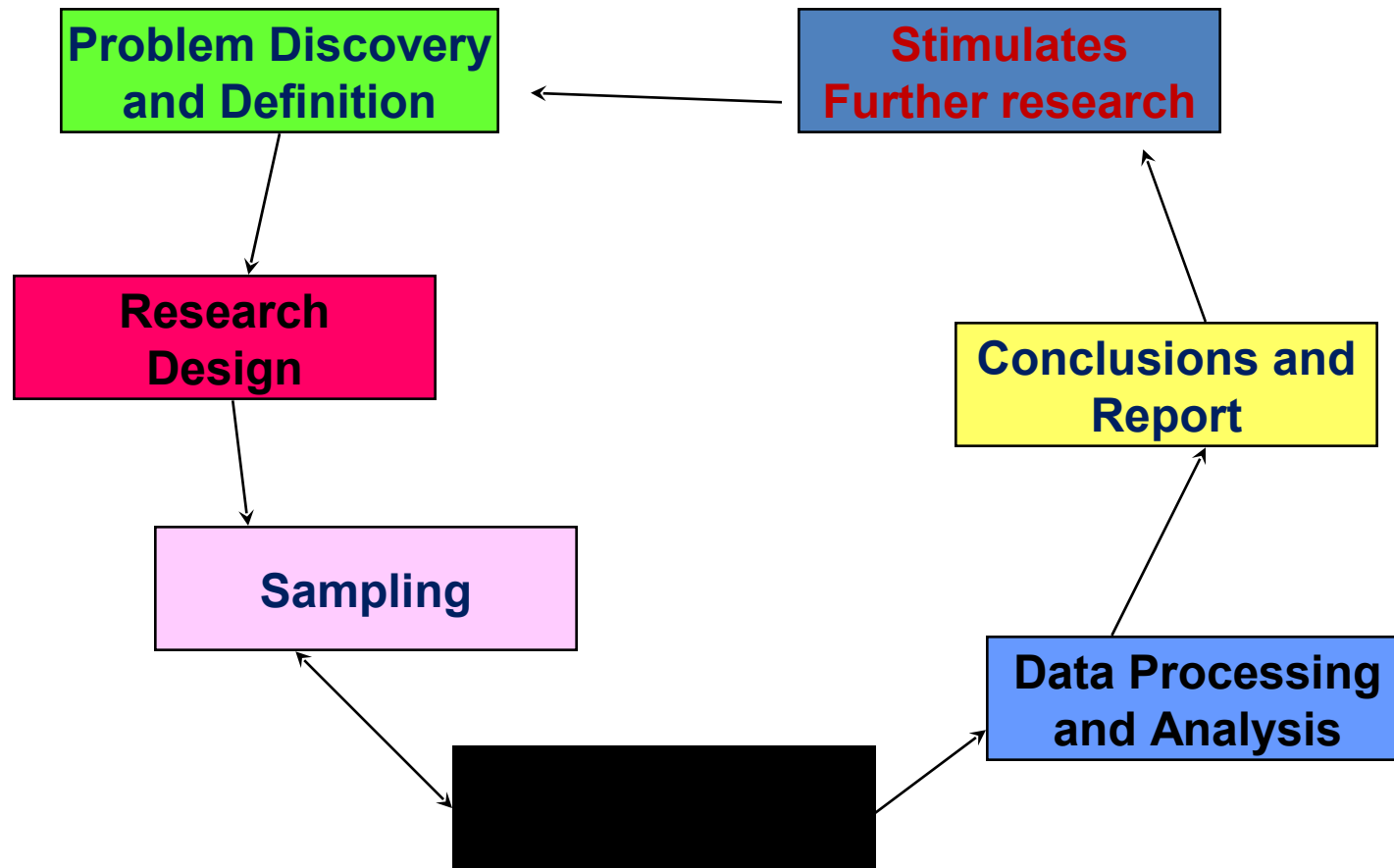


Analyze Data



Interpret and Report

Stages of the Research Process



Problem Discovery and Definition

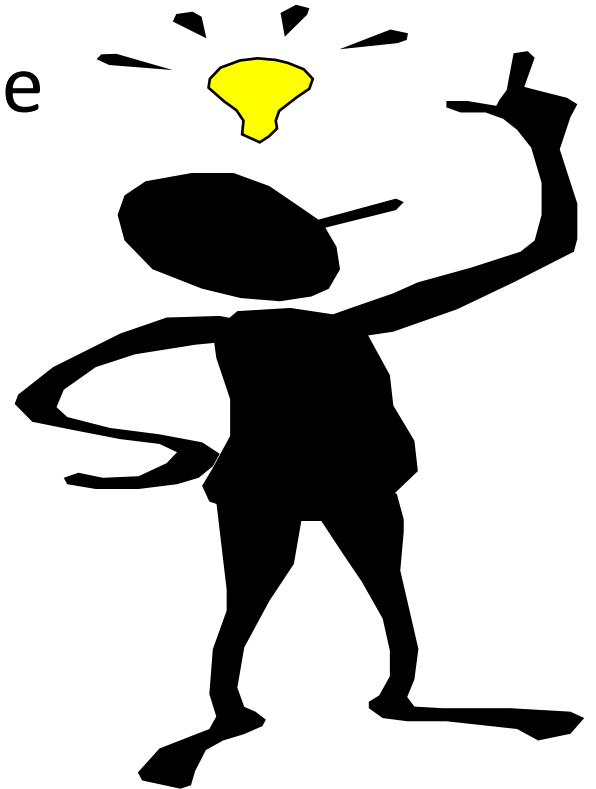
- First and probably most important step
- Too often neglected leading to costly errors
- Provides direction for the project
- Problem, opportunity, or monitor operations
- Discovery before definition
- Must not mistake symptoms for problem

Literature review

- Before proceeding on research work a researcher should undertake extensive literature review connected with the survey.
- For this; academic journals, conferences proceedings, government reports, books etc. must be reviewed depending upon the nature of problem.
- The earlier studies, if any, which are similar to the study in hand should be carefully studied.

Formulation of research objectives and hypothesis

- The **OBJECTIVES** of a research project summaries what is to be achieved by the study.



Formulation of Hypothesis

- Once the problem to be answered in the course of research is finally instituted, the researcher may, if possible, proceed to formulate tentative solutions or answers to it.
- These proposed solutions or explanations are called hypothesis, which the researcher is obliged to test on the basis of facts already known or which can be made known.

Examples of Hypotheses

- H-0: Children do not react to television commercials.
- H-1: Children react to television commercials.
- H-0: Celebrity endorsements do not affect sales.
- H-1: Celebrity endorsements affect the sales.
- H-0: Teenagers are not brand conscious.
- H-1: Teenagers are brand conscious.

Research Design

Research design state the conceptual structure within which research would be conducted. Preparation of a research design involves the following aspects:

- Master plan about research
- Specifies methods and procedures of the research
- Framework for action
- The time available for research
- The cost factor relating to research

Research Proposal

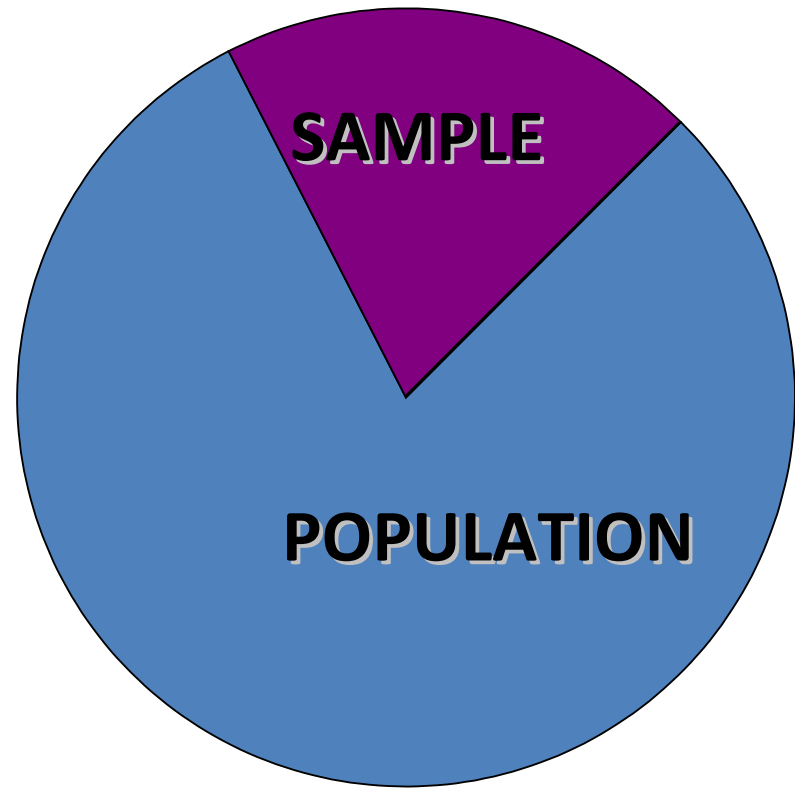
- A written statement of the research design that includes a statement explaining the purpose of the study.
- Detailed outline of procedures associated with a particular methodology

Basic Research Methods

- Surveys
 - Interview
 - Questionnaire
- Experiments control conditions so that one or more variables can be manipulated to test a hypothesis
 - Field
 - Laboratory
- Secondary data
- Observation

Selecting a Sample

**Sample: subset
of a larger population.**



Sampling

- Who is to be sampled?
- How large a sample?
- How will sample units be selected?
 - Probability Samples – every member of the population has a known, nonzero probability of being selected
 - Nonprobability Samples

Data Gathering Stage

- Focus on error minimization
- Pretesting



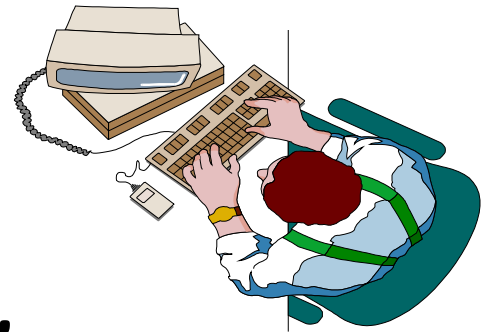
Data Processing and Analysis

- Editing

Checking the data collection forms for omissions, legibility and consistency

- Coding

Rules for interpreting, categorizing and recording the data



Hypothesis-testing:

- After analyzing the data as stated above, the researcher is in a position to test the hypotheses, if any, he had formulated earlier. Do the facts support the hypotheses or they happen to be contrary? This is the usual question which should be answered while testing hypotheses.
- Hypothesis-testing will result in either accepting the hypothesis or in rejecting it.

Generalizations and interpretation

- If a hypothesis is tested and upheld several times, it may be possible for the researcher to arrive at generalisation, i.e., to build a theory.
- As a matter of fact, the real value of research lies in its ability to arrive at certain generalisations.
- If the researcher had no hypothesis to start with, he might seek to explain his findings on the basis of some theory. It is known as interpretation.
- The process of interpretation may quite often trigger off new questions which in turn may lead to further researches.

Conclusions And Report Writing

- Effective communication of the research findings
- Usually includes making recommendations
- Finally, the researcher has to prepare the report of what has been done by him. Writing and presentation of report findings must be done with great care .

